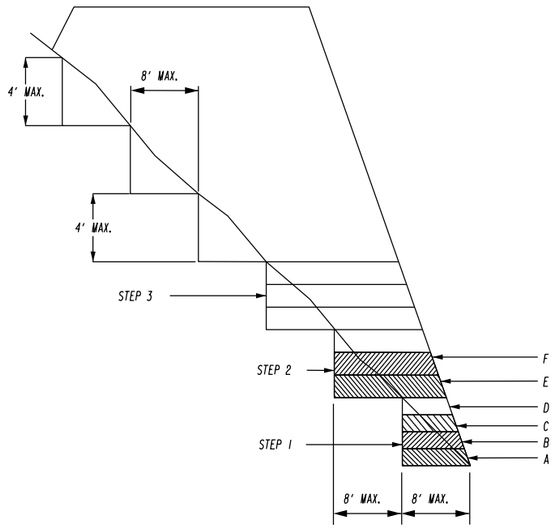


BENCHING DETAIL

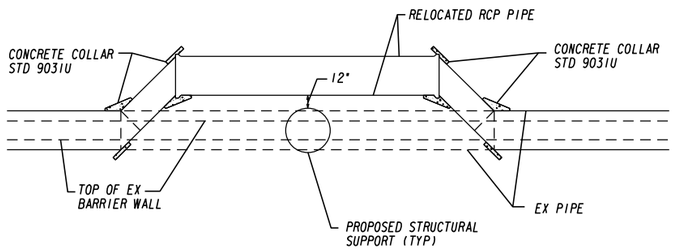
NTS

1. WHERE THE EMBANKMENT IS TO BE PLACED ON A HILLSIDE OR ANOTHER EXISTING EMBANKMENT HAVING A SLOPE OF 3 TO 1 OR STEEPER. THE FOUNDATION MUST BE BENCHED WHILE THE EMBANKMENT IS BEING MADE.
(SEE DIAGRAM AT LEFT.)

2. THE DIAGRAM SHOWS THAT BEFORE LAYER "A" IS PLACED THE FIRST STEP IS TO (1) CUT INTO THE SLOPE A MAXIMUM DISTANCE OF ABOUT 8 FEET (ABOUT ¾ THE WIDTH OF THE TYPICAL D-8 BULLDOZER BLADE). SUCCESSIVE LAYERS B, C, AND D ARE THEN PLACED BEFORE LAYER "E" IS PLACED, THE SECOND STEP IS CUT 8 FEET INTO THE SLOPE AND SUCCESSIVE LAYERS ARE AGAIN PLACED. IF IT IS ANTICIPATED THAT THE VERTICAL PART OF THE STEP WILL EXCEED 4 FEET IF A 8 FEET HORIZONTAL CUT IS MADE, THEN THE ACTUAL CUT STOPS WHEN THE VERTICAL PART REACHES A MAXIMUM OF 4 FEET ALLOWING THE HORIZONTAL DISTANCE TO VARY.

3. THE PROCESS OF BENCHING IS CONSIDERED INCIDENTAL TO THE ITEM OF UNCLASSIFIED EXCAVATION AND BORROW OR GRADING COMPLETE IN CONSTRUCTION OF THE EMBANKMENT AND NO ADDITIONAL MEASUREMENT OF QUANTITY OR PAYMENT WILL BE MADE FOR BENCHING.

STORM PIPE RELOCATION PLAN



NOTES:
1 CONCRETE COLLARS SHOULD BE PLACED AT AN ANGLE OF 45 DEG OR LESS
2 PAYMENT FOR CONCRETE COLLARS IS INCLUDED IN THE PAY ITEM FOR THE PIPE.
3 CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND RESOLVING DRAINAGE CONFLICTS BEFORE EXCAVATION BEGINS.
4 ALL PIPES SHALL BE REINFORCED CONCRETE PIPES (RCP).
5 REPLACE ASPHALT WITH 12.5 MM SUPERPAVE IN KIND.

REMOVAL:

The soils near the proposed grade in the following areas were found to have in-place moisture contents far above the optimum moisture contents. This condition has the potential to cause severe pumping problems during subgrade and base construction. After excavation in these areas is complete, we recommend that 24 inches (or 36 inches if needed) of subgrade soils beneath the pavement and shoulders be removed and either dried out and replaced, or replaced with drier soils:

Station to Station	Location
I-85 NB Widening Borings	
1145+50± to 1170+00±	Right of I-85 NB
1185+00± to 1205+00±	Right of I-85 NB
10+00± to 17+00±	Right of I-85 NB
2136+00± to 2141+00±	Right of I-85 NB
I-85 SB Widening Borings	
1160+00± to 1165+00±	Left of I-85 NB
1175+00± to 1195+00±	Left of I-85 NB
1205+00± to 1215+00±	Left of I-85 NB
I-85 N Express Lane New Alignment Borings	
2144+50± to 2147+50±	Median of I-85
2156+50± to 2163+50±	Median of I-85
2168+50± to 2182+50±	Median of I-85
2185+50± to 2191+50±	Median of I-85

This work should be done at the direction of the Engineer, and may be eliminated if the subgrade soils are dry and stable at the time of construction.

WASTE:

None of the soils encountered on this project will require wasting. However, high-volume change Class IIIC materials excavated from the following areas should not be placed within three feet of the bottom of the subgrade directly beneath the pavement section:

Station to Station	Location
I-85 NB Widening Borings	
1195+00± to 1205+00±	Right of I-85 NB
I-85 SB Widening Borings	
1215+00± to 12+50±	Left of I-85 SB
I-85 N Express Lane New Alignment Borings	
2144+50± to 2147+50±	Median of I-85

These soils may be used in the bottom of high fill sections, or used to flatten side slopes as directed by the Engineer. This work shall be done in accordance with Special Provision 205.

ARCADIS Design & Consultancy for natural and built assets

NO SCALE

RELEASE FOR CONSTRUCTION 07/27/2016

REVISION DATES		

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION

OFFICE: INNOVATIVE DELIVERY

TYPICAL SECTIONS

PROJECT: I-85 NORTH EXPRESS LANE EXTENSION
COUNTY: GWINNETT

DRAWING No. 5-016